

WHAT IS CLAIMED IS:

1. A mattress system, comprising:

a mattress having a top surface and a bottom surface;

a cavity arranged in the mattress, the cavity being open at least toward the top surface and having a defined size;

an expandable cushion arranged in the cavity;

a mattress protector covering at least the top surface of the mattress, the protector including a first portion that extends into the cavity and a second portion that extends over the expandable cushion arranged in the cavity; and

a control system operatively coupled with the cushion to control an expansion and contraction of the cushion, wherein the control system includes a fluidic pump arranged to pump fluid into the expandable cushion, a fluid relief mechanism arranged to allow fluid to escape the expandable cushion, a fluid pressure reservoir for maintaining a relatively constant pressure in the fluidic system, and a fluid pressure switch operable to automatically activate and deactivate the fluidic pump to maintain a defined pressure level in the expandable cushion.
2. The system according to claim 1, wherein the fluid is air, and

wherein a control switch is provided to control an inflation and deflation of the expandable cushion.
3. The system according to claim 2, wherein the control switch is an electric control switch.